

Should Health Systems Agencies Be Involved In Environmental Health Planning?

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Public Law 93-641 provides health systems agencies (HSAs) with a broad planning preview which has enabled a number of agencies to address environmental health issues in their health systems plans. Opponents of HSA involvement in environmental health planning charge that these activities overextend agency resources, duplicate efforts of other government agencies and involve HSAs in "issues of public policy." Closer examination of these charges finds them lacking in validity. The planning activities of health systems agencies are cooperative in nature, drawing upon the planning efforts of other institutions and agencies. It is illogical to exclude environmental concerns from general health planning in light of the impact of the environment upon health. Charges that issues of public policy are inappropriate topics for health planning are seen as attempts to avoid scrutiny of inconsistent legislative policies. Cooperative planning between health systems agencies and environmental health agencies is considered both desirable and essential for the development of effective health planning.

Introduction

The planning purview of health systems agencies (HSAs) is broad and has enabled many agencies to address lifestyle and environmental health issues which are beyond the scope of traditional health care. This is a refreshing departure from the restricted and fragmented pattern of federal health-related programs and is a prerequisite if genuine health planning is to occur.

Opponents of HSA involvement in environmental health planning have charged that these activities overextend agency resources, duplicate efforts of other governmental agencies and involve HSAs in issues of "public policy." It has been proposed that HSAs restrict their planning activities

to health care services and facilities in keeping with the increasing federal emphasis on regulation and cost containment.

This paper discusses health systems agency involvement in environmental health planning, examines the validity of arguments to restrict the scope of health planning, and considers the utility of HSAs as true health planning agencies.

Health Systems Agencies and Environmental Health Planning

Health systems agencies are regional health planning agencies which were created under the provisions of the National Health Planning and Resources Development Act of 1974 (Public Law 93-641). Their stated purposes are to improve health; increase accessibility, acceptability, continuity, and quality of health care; restrain cost and prevent unnecessary duplication of health resources (1). Provisions of the law define planning responsibilities for HSAs which clearly involve environmental health planning.

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Section 1513 of the act states that HSAs shall "... assemble and analyze data concerning ... the environmental and occupational exposure factors affecting immediate and long-term health conditions." The same section charges HSAs to "... establish annually, review and amend as necessary a health systems plan ... which shall be a detailed statement of goals (A) describing a healthful environment. ...".

Section 1502 lists ten national health priorities which health systems agencies are instructed to address in their plans. Priority eight calls for "the provision of activities for prevention of disease including nutritional and environmental factors affecting health and the provision of preventive health services." Thus HSAs have a broad planning purview, a charge to improve health status and a clearly stated mandate to involve themselves in environmental health planning.

A number of HSAs have addressed specific environmental health issues and some have developed relatively comprehensive environmental health sections in their health systems plans. The following environmental health topics have been addressed to date in various agency plans: problems of population numbers and distribution, land use, transportation, shelter, air pollution, water pollution, water supply, solid waste, environmental injury, biological insults, environmental chemicals, food safety and noise. These topics are included in the current health systems plans of Houston, Dallas, and New York City.

Opponents of HSA involvement in environmental health planning raise a number of objections to this comprehensive approach and suggest that agencies should restrict their planning efforts to the health care delivery system. This view was recently reflected in a proposed amendment to the planning act contained in S.2410, the Health Planning Act Amendments of 1978 (2). These amendments were not passed last year because of time constraints, but are scheduled to be reintroduced this year. Basically the curtailing amendment would restrict the planning efforts of HSAs to "improving health services in areas that are underserved while trying to cut down on services and facilities in areas which are overserved" (2). The justification for the restriction is that under the current legislation HSAs have overextended their planning resources, duplicated the activities of other governmental agencies, and involved themselves in a broad range of public policy issues. Upon closer inspection, however, these criticisms lack validity and the intent appears to be to ensure that HSAs deemphasize planning for

health and assume a more active role in cost containment.

Overextension of Resources?

The criticism that environmental health planning overextends the resources of HSAs implicitly suggests that these resources could be more profitably utilized by restricting their focus to the health care industry. This reflects the federal preoccupation with cost containment through regulation (3), ignores the health impact of environmental factors (4, 5), and reveals a greater concern for economy than health. It is generally agreed that most of the major gains in health status which have occurred in industrialized nations have resulted primarily from improved economic and environmental conditions, while therapeutic medicine played a lesser role (6-8). Environmental efforts in food and water safety, sanitation, and vector control are central in the control of infectious diseases which a century ago were leading causes of death. Land use and population control are indirectly related to the etiology of both chronic and infectious disease. Overcrowding has long been recognized as a contributing factor in infectious epidemics and is now recognized as a major cause of stress as well (9). Stress, in turn, has been implicated in the etiology of heart disease (10), stroke (11), and cancer (12). Chronic stress has also been implicated in suppressing immune system functioning, thus increasing susceptibility to infectious disease (13).

Transportation is related to both traffic deaths and automobile emissions. Traffic fatalities are the leading cause of death in persons age 1 to 44 (14), accounting for 18.4% of all deaths in this age group. Automobile emissions contribute to air pollution, which, in turn, has been linked to chronic emphysema, obstructive lung disease, minor eye and respiratory irritation, and lung cancer (15-17).

Environmental chemicals and occupational exposure to carcinogens are growing health concerns and increasingly the development of cancer is being linked to environmental exposure (18). It is difficult to understand how health planning can occur if this broad range of environmental health topics is omitted. If overextension of resources is a problem and if HSAs are to remain charged to improve the health of the people they serve, then it appears necessary to curtail activity in areas least likely to effect gains in health status and increase emphasis in more promising areas. Considerable evidence suggests that if this logic is fol-

lowed, HSAs would decrease their involvement in remedial health care and emphasize prevention through lifestyle modification and environmental health measures (4-8, 19).

Duplication of Efforts?

The charge that the inclusion of environmental health sections in health systems plans (HSP) duplicates the efforts of other governmental environmental regulatory agencies reveals a basic lack of understanding of the role of HSAs. Since HSAs are seldom the principle actors in carrying out their planning recommendations, the plans must reflect the planning efforts of a variety of institutions and agencies within the health service area if they are to serve as regional statements of health needs and plans of action. The HSP is a community document reflecting major health concerns and proposed actions to address these concerns (20). This is in contrast to the agency work program which outlines what the HSA staff will do in the coming year. For example, if a health systems agency determined that a greater emphasis on public immunizations was needed and undertook a planning effort to address the need it would seek to involve local health departments and other sources of immunization services within the region. Thus, the planning recommendations for increasing immunization levels would reflect the planning efforts of health departments and other provider institutions with the HSA serving primarily as a catalyst to shape these institutional level plans into a comprehensive region-wide strategy for change. This would be true for many if not most of the areas addressed in health systems plans. Agencies which plan for changes involving health care providers but fail to involve those providers in developing the plans are unlikely to see their recommendations acted upon. The same is true for environmental health planning. Government environmental agencies usually have both planning and regulatory functions. They are important actors in the environmental health arena. Typically, however, they have restricted jurisdictions and lack the purview to develop comprehensive regional environmental plans (21). HSAs should involve these agencies in their environmental health planning efforts. This is not a duplication of efforts, but rather a cooperative effort in which environmental health planning is integrated into the scope of general health planning. Encompassing the planning efforts of categorical environmental and health programs into the broader

scope of health systems planning and promoting an active interchange between HSAs and other health related programs lays the foundation for a comprehensive, regional approach to health planning. This in turn goes a long way toward rationalizing health planning and is a prerequisite for enabling health planning to rationalize the health care system. It is also a refreshing departure from the fragmented, categorical programs based upon restricted definitions of health which has characterized federal involvement in both health and environmental areas (21, 22).

Public Policy Issues?

The primary justification for restricting the scope of health planning is that health systems agencies have involved themselves in areas of public policy. Senator Schweiker (R, Pa.) introduced the curtailing amendment and cited a health systems plan which addressed "a broad range of public policy issues including anti-smoking, air quality, sex education, general traffic safety standards, air bags, the 55 mile-per-hour speed limit and auto emission standards" (2). It is somewhat unclear, however, what defines "public policy" and why areas with such profound impact upon health should be excluded from the planning purview of regional health planning agencies because they are so defined.

Traffic safety, air bags, and the 55 mile-per-hour speed limit are clearly related to traffic deaths whose impact has been previously discussed. Likewise, automobile emissions and air quality have significant effects on health. Anti-smoking and sex education efforts are not restricted to the realm of environmental health, but both are germane to health planning as witnessed by the relationship of smoking to the etiology of heart disease and lung cancer (23, 24) and the need for effective sex education to help teenagers avoid unwanted pregnancies (25).

Upon closer inspection it appears that "public policy" in these instances connotes areas where health and economic interests conflict and/or where congressional actions to date have been ambiguous. The adverse health consequences of smoking are profound and have been well documented for more than a decade but the tobacco industry is a major employer and source of tax revenues; so while DHEW wages a war on smoking, Congress continues to subsidize the tobacco industry with tax dollars. In the area of air quality, the economic impact of regulations and the modification to industrial plants and automobiles which

they require are given strong consideration when standards are established and enforced. Sex education is widely advocated as a means of helping teenagers avoid unwanted pregnancies, yet while DHEW makes a major effort to reduce teenage pregnancy, Congress would apparently prefer that health systems agencies lend no support to local school boards in implementing sex-education curriculums.

It is apparent that the areas of public policy cited by Senator Schweiker are, in fact, major health issues which probably influence health status to a greater extent than all remedial medical services combined. Defining these topics as "public policy" and forbidding HSAs to address them in their plans is an ill-disguised "gag rule" to prevent local citizens from delving into some of the more glaring inconsistencies in the national "non-policy" on health. The inability of Congress to approach health holistically and develop comprehensive programs or policies arises in part from the fragmented health committee structure through which health legislation must pass (26) and the powerful lobbying efforts of vested interests (27). That Congress is so impeded is unfortunate, but impeding the efforts of others is inexcusable. There is little evidence to suggest that the bulk of wisdom in the health arena rests with elected officials and it does not appear to be a major gamble to allow health systems agencies the freedom to take a comprehensive approach to health planning.

What Value Is Health Planning?

It is emphasized that when major factors which influence health status are excluded from the planning purview, effective health planning cannot occur. Further, restricting the planning efforts to health care services and facilities is not health planning but rather health care planning. They differ in that the former addresses the health of the population while the latter is restricted to the delivery of health care services. It appears that Congress intended that HSAs conduct health planning and not be restricted to health care planning when it drafted the legislation in 1974. This should not be altered just as health systems agencies are maturing in an attempt to find a quick solution for health cost inflation. It is doubtful that the problem of health care costs is amenable to quick solutions. Clearly the effectiveness of federal intervention in controlling costs has been modest to date (28). It may well be that the best way to lessen tomorrow's health expenditures is to devote more em-

phasis to prevention and promotion today. This too has not been conclusively demonstrated, but the evidence supporting prevention is at least as strong as that supporting regulation. Certainly, from a humanitarian viewpoint, devoting resources to improving health appears more justified than utilizing them in a regulatory duel with the health care industry. It has been demonstrated in both Canada (29) and the United States (19, 30) that a comprehensive view of health in which environmental, biological and lifestyle determinants of health are considered as well as the health care system, leads to an increased emphasis upon preventing disease and improving health. This alone seems ample justification for allowing HSAs to retain a broad planning mandate.

The greatest value of health planning is that it can lead to improved health status over time. Already a number of HSAs have made improving health a major focus of their activities. A recent study (31) has revealed that at least half of all HSAs across the nation are involved in health promotion activities. These activities will be curtailed or abolished if the scope of planning is restricted.

Conclusion

To ask if HSAs should be involved in environmental health planning is to ask the wrong question. The central question is, "Should HSAs conduct health planning or be restricted to health care planning?" Under the original law a number of agencies have chosen to place a major emphasis on improving health. In taking a comprehensive approach to planning and emphasizing a positive position toward health, they may well have become the only true "health planning" forums in the nation. To deprive them of the ability to address environmental health issues or other issues of "public policy" is to basically alter the focus of the National Health Planning and Resources Development Act and put an end to health planning under its provisions.

REFERENCES

1. National Health Planning and Resources Development Act of 1974. 93rd Congress, 2nd Session, House of Representatives Report No. 93-164, p. 13.
2. Congressional Record, Senate, July 7, 1978, S111911.
3. National Journal, special policy forum reprint, May, 1978.
4. Purdom, P. W., Ed. Environmental Health, Academic Press, New York and London, 1971.
5. Waldbott, G. L. Health Effects of Environmental Pollutants, C. V. Mosby, St. Louis, 1973.
6. McKinlay, J. B., and McKinlay, S. M. The questionable contribution of medical measures to the decline of mortal-

- ity in the United States in the twentieth century. *Health and Society* 405 (Summer 1977).
7. McKeown, T. *The Role of Medicine: Dream, Mirage or Nemesis?* Nuffield Provincial Hospital Trust, London, 1976.
 8. World Health Organization. Monograph No. 34, Geneva, Switzerland, 1957.
 9. Bruhn, J. G., and Schottstaedt, W. W., "Modern society, urbanization and stress. In: *Environmental Problems in Medicine*, W. D. McKee, Ed., Charles C Thomas, Co., Springfield, Ill., 1974.
 10. Wolf, S. Studies of ventricular premature contraction in ischemic heart disease in association with emotional and cognitive states during instrumental learning and various stages of sleep. *Psychosomatic Med.* 36(5): 465 (1974).
 11. Friedman, M., Rosenman, R. H., and Carrol, V. Changes in serum cholesterol and blood clotting time in men subjected to cyclic variation of occupational stress. *Circulation* 17: 852 (1958).
 12. Riley, V. Mouse mammary tumors: alteration of incidence as apparent function of stress. *Science* 189: 465 (1975).
 13. Bourne, H. R., Licktenstein, L. M., Melman, K. L., Henney, C. S., Weinstein, T., and Shearer, G. M. Modulation of inflammation and immunity by cyclic AMP. *Science* 184: 19 (1974).
 14. Accident Facts, National Safety Council, 1977.
 15. Williamson, S. J. *Fundamentals of Air Pollution*, Addison-Wesley, Reading, Mass., 1973, p. 41.
 16. Counan, R. *Pollution Primer*, American Lung Association, 1974.
 17. Stern, A. C., ed. *Air Pollution*, Academic Press, New York and London, 1968, pp. 547-609.
 18. Ashford, N. *Crisis in the Workplace: Occupational Disease and Injury*, A Report to the Ford Foundation, MIT Press, Cambridge, Mass., 1976.
 19. Dever, A.G.E. *The pursuit of health*. Georgia Department of Human Resources, Division of Physical Health, 1976.
 20. Cameron, C., Jr., *Fundamentals of Health Planning*, Region VI Center for Health Planning, June, 1976, pp. 51-70.
 21. Bureau of Community Environmental Health Planning, *Environmental Health Planning*, Public Health Science, Publication #2120, Washington, D.C., 1971.
 22. Kennedy, E. M. Congress and national health policy. *Am. J. Publ. Health* 68: 241 (1978).
 23. *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*, Public Health Service Publication No. 1103, January 1968.
 24. *The Health Consequences of Smoking*, U. S. Department of Health Education and Welfare Public Health Service, Public Health Service Publication No. 1696, January 1968.
 25. *11 Million Teenagers*, Alan Guttmacher Institute, 1976.
 26. Brown, L. D. Formulation of federal health-care policy. *Bull. N. Y. Acad. Med.* 54: 45-58 (1978).
 27. Mathews, T., Doyle, J. C., Hubbard, H. W., Lindsay, S., Willcott, J., and Kasindorf, M. Single issue politics. *Newsweek*, November 6, 1978.
 28. Salkever, D. S. Will regulation control health care costs? *Bull. N. Y. Acad. Med.* 54: 73 (1978).
 29. Lalonde, M. *A New Prospective on the Health of Canadians*, A Working Document. Office of the Canadian Minister of National Health and Welfare, Ottawa, 1974.
 30. *A Plan for Health in Oklahoma*, Vol. 1, Oklahoma Health Systems Agency, January 1978.
 31. Higgins, C. W., Philips, B. U., and Bruhn, J. G. A national survey of health promotion activities in health systems agencies. *Prev. Med.* 9: 150 (1980).